BEL AIR MOBILE HOME PARK (PWS 2290002)
SOURCE WATER ASSESSMENT FINAL REPORT

October 25, 2001

State of Idaho
Department of Environmental Quality

Executive Summary

Under the Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the act. This assessment is based on a land use inventory of the designated assessment area, sensitivity factors associated with the wells, and aquifer characteristics.

This report, *Source Water Assessment for Bel Air Mobile Home Park*, describes the public drinking water system, the boundaries of the zones of water contribution, and the associated potential contaminant sources located within these boundaries. This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this source. **The results should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the water system.**

The Bel Air Mobile Home Park drinking water system consists of two wells. The original well on this property, drilled in 1962, is now considered a backup well and is referred to as the "old well". A more recent primary well was drilled in 1992 and is referred to as the "new well". A review of the State drinking water sampling data (DWIMS) indicates that there have been trace detections of the inorganic contaminants (IOC) sodium, fluoride and sulfate in the water system. There has also been a single detection of iron that exceeded State and Federal secondary maximum contaminant levels (MCL). In 1995, there was a single detection of total coliform microbial contamination. Total coliform was again detected in August 2000. This is a normal number of detection's for a system of this size. All samples recorded in DWIMS for this facility are distribution system samples, making it impossible to determine if one or both wells have elevated parameters or if the source of contamination is in the delivery system downstream of the wells. The source and route of microbial contamination could be associated with either well or it could be derived from somewhere downstream of the wells. Although both wells are within 100 feet of one another, the delineation capture zone for the old well encompasses about one half of the area of the new well (Figures 2 and 3). This volume difference in delineation areas is due to a relatively lower pumping rate for the old well. There are no recorded detections of volatile organic contaminants (VOC) like petroleum products or synthetic organic contaminants (SOC) like pesticides.

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a "pristine" area or an area with numerous industrial and/or agricultural land uses that require education and surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

DEQ's records indicate that the high IOC (especially iron) content in the local ground water is being removed via a commercial water softener process. This practice should be continued. Any spills from Highway 95 should be carefully monitored. Other practices aimed at reducing the leaching of chemicals from agricultural land within the designated source water areas should be implemented. Most of the designated areas are outside the direct jurisdiction of the Bel Air Mobile Home Park. Partnerships with state and local agencies and industry groups should be established and are critical to success. Due to the time involved with the movement of ground water, source water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term. Source water protection activities for agriculture should be coordinated with the Idaho State Department of Agriculture, the Soil Conservation Commission, the local Soil Conservation District, and the Natural Resources Conservation Service.

A community with a fully developed source water protection program will incorporate many strategies. For assistance in developing protection strategies please contact the Boise Regional Office of the Idaho Department of Environmental Quality or the Idaho Rural Water Association.

SOURCE WATER ASSESSMENT FOR BEL AIR MOBILE HOME PARK, LATAH COUNTY, IDAHO

Section 1. Introduction - Basis for Assessment

The following sections contain information necessary to understand how and why this assessment was conducted. **It is important to review this information to understand what the ranking of this source means.** A map showing the delineated source water assessment area and the inventory of significant potential sources of contamination identified within that area are attached. The list of significant potential contaminant source categories and their rankings, used to develop this assessment, is also attached.

Level of Accuracy and Purpose of the Assessment

The Idaho Department of Environmental Quality (DEQ) is required by the U.S. Environmental Protection Agency (EPA) to assess the over 2,900 public drinking water sources in Idaho for their relative susceptibility to contaminants regulated by the Safe Drinking Water Act. This assessment is based on a land use inventory of the delineated assessment area, sensitivity factors associated with the wells, and aquifer characteristics. All assessments must be completed by May of 2003. The resources and time available to accomplish assessments are limited. Therefore, an in-depth, site-specific investigation to identify each significant potential source of contamination for every public water system is not possible. **This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this source. The results should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the water system.**

The ultimate goal of this assessment is to provide data to local communities to develop a protection strategy for their drinking water supply system. The Idaho Department of Environmental Quality (DEQ) recognizes that pollution prevention activities generally require less time and money to implement than treating a public water supply system once it has been contaminated. DEQ encourages communities to balance resource protection with economic growth and development. The decision as to the amount and types of information necessary to develop a source water protection program should be determined by the local community based on its own needs and limitations. Wellhead or source water protection is one facet of a comprehensive growth plan, and it can complement ongoing local planning efforts.

Section 2. Conducting the Assessment

General Description of the Source Water Quality

The two wells at Bel Air Mobile Home Park referred to as the "old" and "new" wells are community wells with 56 connections serving 59 mobile homes and three houses. The two wells are less than one hundred feet apart and are located less than one mile north of Moscow between Polk Street and Highway 95 in Latah County (Figure 1).

Significant water chemistry problems have been recorded from composite samples of both wells. Trace amounts of the inorganic contaminants (IOC) sulfate, fluoride and sodium have been detected, but at levels below the Maximum Contaminant Level (MCL). However, one sample collected in August 1999 detected iron at a level above the secondary MCL. Microbials have occasionally been detected. No detections of synthetic organic contaminants (SOC) or volatile organic contaminants (VOC) have been recorded. The primary water quality issue currently facing Bel Air Mobile Home Park is that of IOC and microbial contamination and the problems associated with managing this contamination.

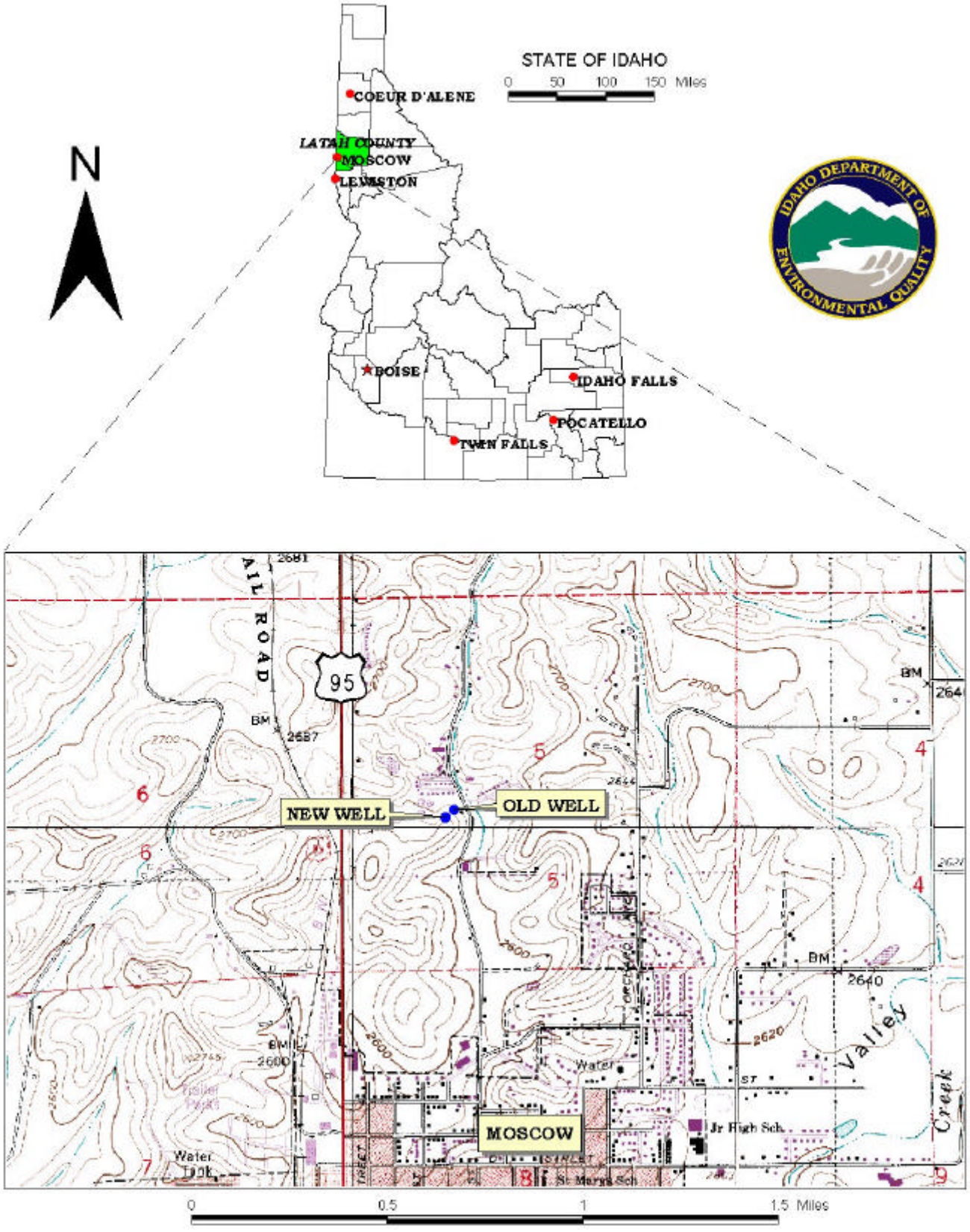
Defining the Zones of Contribution--Delineation

The delineation process establishes the physical area around a well that will become the focal point of the assessment. The process includes mapping the boundaries of the zone of contribution into time of travel zones (zones indicating the number of years necessary for a particle of water to reach a well) for water in the aquifer. DEQ used a refined computer model approved by the EPA in determining the 3-year (Zone 1B), 6-year (Zone 2), and 10-year (Zone 3) time-of-travel (TOT) for water associated with the Wanapum aquifer in the vicinity of the Bel Air Mobile Home Park. The computer model used site-specific data, assimilated by DEQ from a variety of sources including local area well logs. The delineated source water assessment areas for the old well and for the new well at Bel Air Mobile Home Park are depicted in figures 2 and 3. The delineation area for the new well is approximately twice as large as the delineation area for the old well because the pumping rate for the new well is an order of magnetute higher (4,973 cf/d) than that of the old well. The actual data used by DEQ in determining the source water assessment delineation areas is available upon request.

Identifying Potential Sources of Contamination

A potential source of contamination is defined as any facility or activity that stores, uses, or produces, as a product or by-product, the contaminants regulated under the Safe Drinking Water Act and has a sufficient likelihood of releasing such contaminants at levels that could pose a concern relative to drinking water sources. The goal of the inventory process is to locate and describe those facilities, land uses, and environmental conditions that are potential sources of ground water contamination. The locations of potential sources of contamination within the delineation areas were obtained by field surveys conducted by DEQ and from available databases. The dominant land use outside the Bel Air Mobile Home Park is irrigated agricultural. Land use within the immediate area of the wellheads consists of the mobile home park and a major transportation corridor.

FIGURE 1. Geographic Location of the Bel Air Mobile Home Park



It is important to understand that a release may never occur from a potential source of contamination provided best management practices are used at the facility. Many potential sources of contamination are regulated at the federal level, state level, or both, to reduce the risk of release. Therefore, when a business, facility, or property is identified as a potential contaminant source, this should not be interpreted to mean that this business, facility, or property is in violation of any local, state, or federal environmental law or regulation. What it does mean is that the potential for contamination exists due to the nature of the business, industry, or operation. There are a number of methods that water systems can use to work cooperatively with potential sources of contamination, such as educational visits and inspections of stored materials. Many owners of such facilities may not even be aware that they are located near a public water supply well.

Contaminant Source Inventory Process

A two-phased contaminant inventory of the study area was conducted during May of 2000. The first phase involved identifying and documenting potential contaminant sources within the Bel Air Mobile Home Park Source Water Assessment Area through the use of computer databases and Geographic Information System maps developed by DEQ. The second or enhanced phase of the contaminant inventory involved contacting the operator to validate the sources identified in phase one and to add any additional potential sources in the area.

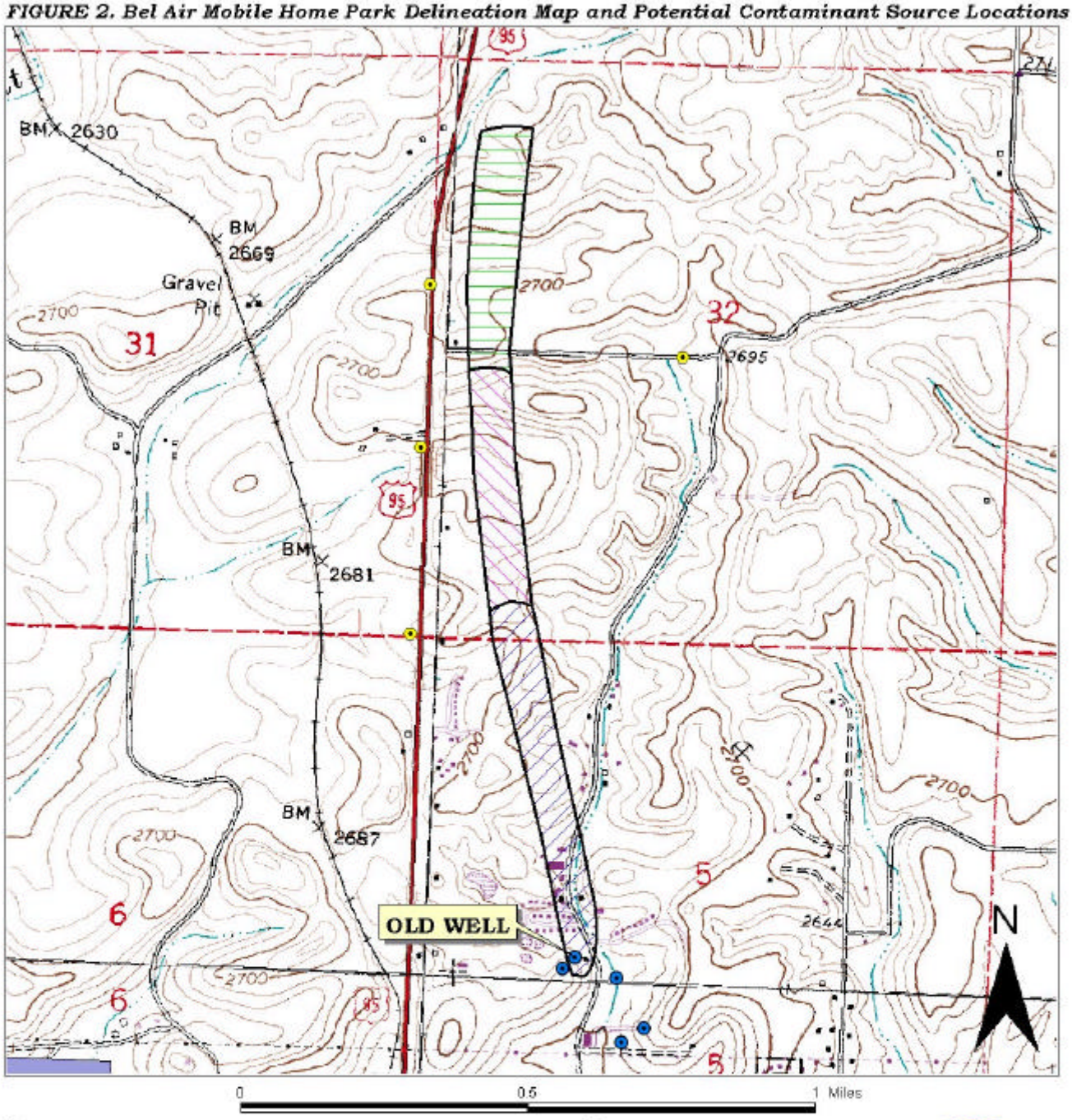
There are no potential contaminant sites located within the delineated source water area for the old well. However, due to the substantially larger delineation area for the new well this water source has four potential contaminant sites. Highway 95 is located in the 3, 6 and10-year time of travel zone for the new well. If an accidental spill occurred along this transportation corridor, a variety of hazardous chemicals or microbial contaminants could be added to the aquifer system. Existing contaminants of concern include IOCs and microbials. Although microbials have been detected there is no obvious source listed in the potential contaminant inventory. The source and route of microbial contamination could be associated with either well or it could be derived from somewhere downstream of the wells. The March 24, 1998 Drinking Water Monitoring Waiver Application for this facility mentions that there is a sewage lagoon within 1/4 mile of the wells. The three potential contaminant sites are listed in Table 1. Figures 2 and 3 show the delineation areas for both wells.

Table 1. Bel Air Mobile Home Park New Well, Potential Contaminant Inventory

SITE #	Source Description[1]	TOT Zone[2] (years)	Source of Information	Potential Contaminants[3]
1	Construction Business	6	Database Search	IOC,VOC, SOC
2	Meat Packer	6	Database Search	IOC,VOC, SOC
3	Machine Shop	10	Database Search	IOC,VOC, SOC
	Highway	3,6,10	Database Search	IOC,VOC, SOC, M

[2] TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead
[3] IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical, M = microbials

FIGURE 2. Bel Air Mobile Home Park Delineation Map and Potential Contaminant Source Locations



LEGEND

Time of Travel Zones
- 1 (3 yr TOT)
- 2 (6 yr TOT)
- 3 (10 yr TOT)
- Wellhead
- Enhanced Inventory
- CERCLIS Site
- RCRIS Site
- Dairy
- LUST Site
- Closed UST Site
- Open UST Site
- Business Mailing List
- NPDES Site
- Mine
- AST
- Toxic Release Inventory
- SARA Title III Site (EPCRA)
- Recharge Point
- Injection Well
- Group1 Site
- Cyanide Site
- Landfill
- Wastewater Land App.Site

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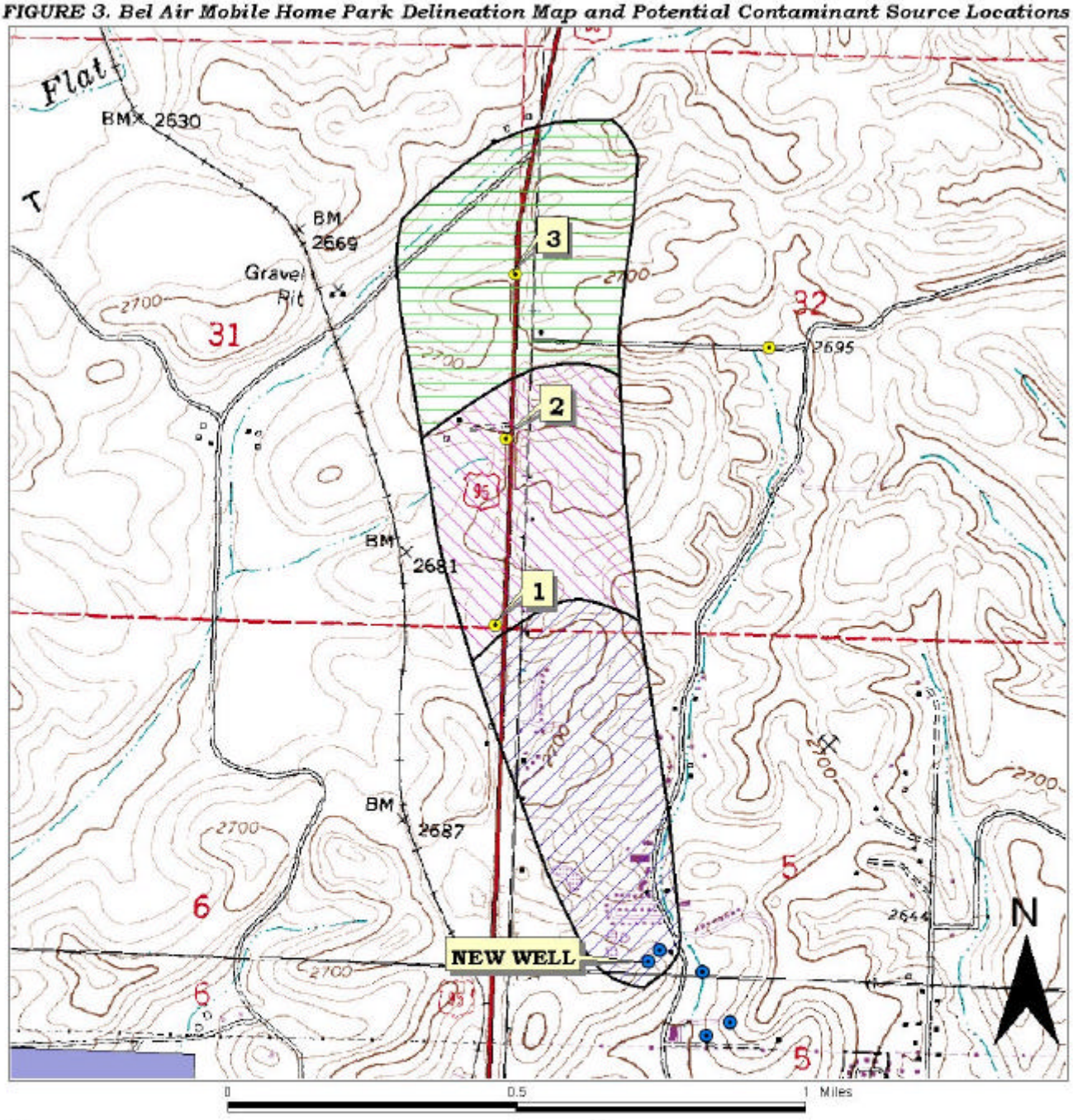
PWS# 2290002
OLD WELL

FIGURE 3. Bel Air Mobile Home Park Delineation Map and Potential Contaminant Source Locations



LEGEND

Time of Travel Zones
- 1 (3 yr TOT)
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- 3 (10 yr TOT)
- Wellhead
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PWS# 2290002
NEW WELL

Section 3. Susceptibility Analyses

The water system's susceptibility to contamination was ranked as high, moderate, or low risk according to the following considerations: hydrologic characteristics, physical integrity of the well, land use characteristics, and potentially significant contaminant sources. The susceptibility rankings are specific to a particular potential contaminant or category of contaminants. Therefore, a high susceptibility rating relative to one potential contaminant does not mean that the water system is at the same risk for all other potential contaminants. The relative ranking that is derived for each well is a qualitative, screening-level step that, in many cases, uses generalized assumptions and best professional judgement. The following summaries describe the rationale for the susceptibility ranking.

Hydrologic Sensitivity

Hydrologic sensitivity is moderate for both wells (see Table 2). This reflects the nature of the soils being in the poor to moderately well drained class, which could facilitate the downward movement of contaminants. Well logs indicate that both wells' vadose zone (zone from land surface to the water table) is composed of broken basalt, which may also facilitate downward movement of contaminants. The wells also do not have the requisite 50 feet cumulative low permeability formations, which further contributes to the score.

Well Construction

Well construction directly affects the ability of both wells to protect the aquifer from contaminants. The Bel Air Mobile Home Park drinking water system consists of two wells that extract ground water for residential uses. The well system construction score was low risk for the new well, based on a 1995 sanitary survey and well log information. The old well ranks at the high end of moderate risk based on limited information available from the well log. That information suggests that the old well's collar is seated in scoria- a very high permeability form of volcanic rock. Although current Idaho Department of Water Resources standards are not being met due to casing thickness and collar seal information for the old well, flood protection standards for both wells are being met. Important protection aspects of the current standards include minimum casing thickness requirements and the requirement that a well's casing and annular seal be seated in a low permeability geologic unit.

The Idaho Department of Water Resources *Well Construction Standards Rules* (1993) require all Public Water Systems (PWSs) to follow DEQ standards as well. IDAPA 58.01.08.550 requires that PWSs follow the *Recommended Standards for Water Works* (1997) during construction. Table 1 of the *Recommended Standards for Water Works* (1997) states that 6-inch casing requires a thickness of 0.288 inches.

Based on water chemistry data and local area well logs, the Bel Air Mobile Home Park wells are drawing water from the shallow Wanapum aquifer. Although this aquifer is thought to be approximately 450 feet thick in this area, the wells are drawing from the uppermost 50 feet of the Wanapum aquifer.

Potential Contaminant Source and Land Use

The predominant land use in the area is residential and irrigated agriculture. Significant water chemistry problems have been recorded from composite samples of both wells that may be associated with local land use. Trace amounts of the IOC sulfate, fluoride and sodium have been detected, but at levels below MCL. However, one sample collected in August 1999 detected iron at a level above MCL. Microbials have been detected on several occasions. The source and route of microbial contamination could be associated with either well or it could be derived from somewhere downstream of the wells. A March 24, 1998 Drinking Water Monitoring Waiver Application for this facility mentions that there is a sewage lagoon within 1/4 mile of the wells. There have been no recorded detections SOC or VOC. The primary water quality issues currently facing Bel Air Mobile Home Park are that of IOC and microbial contamination and the problems associated with managing this contamination.

Final Susceptibility Rating

The Bel Air Mobile Home Park drinking water system has an overall high risk rating for IOC and microbial contamination. Because no SOC or VOC contaminants have been recorded for the Bel Air Mobile Home Park, the system has a moderate risk rating for those potential contaminants.

Table 2. Summary of Bel Air Mobile Home Park Susceptibility Evaluation

Well	Susceptibility Scores[1]									
	Hydrologic Sensitivity	Contaminant Inventory				System Construction	Final Susceptibility Ranking			
		IOC	VOC	SOC	Microbials		IOC	VOC	SOC	Microbials
Old well	M	H	L	L	H	M	H	M	M	H
New well	M	H	L	L	M	L	H	M	M	H

[1]**H = High Susceptibility, M = Moderate Susceptibility, L = Low Susceptibility, IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical**

Susceptibility Summary

The Bel Air Mobile Home Park drinking water system consists of two wells. A review of DWIMS indicates that there have been trace detections of the IOCs sodium, fluoride and sulfate in the water system. There has also been a single detection of iron that exceeded State and Federal secondary maximum contaminant levels (MCL). Since 1995, there were several detections of total coliform microbial contamination. Because the water samples recorded in DWIMS are composites of both wells it is impossible to determine if contamination is entering the system via one well, both wells or along the delivery system. These conditions combined with the shallow aquifer source, agricultural land uses and the nearby location of Highway 95 result in the system's overall high risk rating for IOC and microbial contamination. Because no SOC or VOC contaminants have been recorded and there are few of those types of potential sources for the Bel Air Mobile Home Park, the system has a moderate risk rating for those potential contaminants.

Section 4. Options for Source Water Protection

The susceptibility assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what the susceptibility ranking a source receives, protection is always important. Whether the source is currently located in a "pristine" area or an area with numerous industrial and/or agricultural land uses that require education and surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

An effective source water protection program is tailored to the particular local source water protection area. A community with a fully developed source water protection program will incorporate many strategies. The primary water quality issue currently facing Bel Air Mobile Home Park is that of IOC and microbial contamination and the problems associated with managing this contamination. In 1995, there was a detection of total coliform microbial contamination. Total coliform was again detected in August 2000. Since the water samples recorded in DWIMS are composites of both wells it is impossible to determine if contamination is entering the system via one well, both wells or along the delivery system somewhere downstream of the wells. Any spills from Highway 95 should be carefully monitored. Other practices aimed at reducing the leaching of agricultural chemicals from agricultural land within the designated source water areas should be implemented. DEQ's records indicate that the high IOC (especially iron) content in the local ground water is being removed via a commercial water softener process. This procedure should be continued. Most of the designated areas are outside the direct jurisdiction of the Bel Air Mobile Home Park. Partnerships with state and local agricultural agencies and industry groups should be established and are critical to success. Due to the time involved with the movement of ground water, wellhead protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term. Source water protection activities for agriculture should be coordinated with the Idaho State Department of Agriculture, the Soil Conservation Commission, the Payette Soil and Water Conservation District, and the Natural Resources Conservation Service.

Assistance

Public water suppliers and others may call the following DEQ offices with questions about this assessment and to request assistance with developing and implementing a local protection plan. In addition, draft protection plans may be submitted to the DEQ office for preliminary review and comments.

Lewiston Regional DEQ Office	(208) 799-4370
State DEQ Office	(208) 373-0502

Website: http://www2.state.id.us/deq

Water suppliers serving fewer than 10,000 persons may contact John Bokor, Idaho Rural Water Association, at 1-800-962-3257 for assistance with wellhead protection strategies.

POTENTIAL CONTAMINANT INVENTORY
LIST OF ACRONYMS AND DEFINITIONS

AST (Aboveground Storage Tanks) – Sites with aboveground storage tanks.

Business Mailing List – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

CERCLIS – This includes sites considered for listing under the **Comprehensive Environmental Response Compensation and Liability Act (CERCLA)**. CERCLA, more commonly known as Superfund is designed to clean up hazardous waste sites that are on the national priority list (NPL).

Cyanide Site – DEQ permitted and known historical sites/facilities using cyanide.

Dairy – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

Deep Injection Well – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

Enhanced Inventory – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

Floodplain – This is a coverage of the 100year floodplains.

Group 1 Sites – These are sites that show elevated levels of contaminants and are not within the priority one areas.

Inorganic Priority Area – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

Landfill – Areas of open and closed municipal and non-municipal landfills.

LUST (Leaking Underground Storage Tank) – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

Mines and Quarries – Mines and quarries permitted through the Idaho Department of Lands.)

Nitrate Priority Area – Area where greater than 25% of wells/springs show nitrate values above 5mg/l.

NPDES (National Pollutant Discharge Elimination System) – Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

Organic Priority Areas – These are any areas where greater than 25 % of wells/springs show levels greater than 1% of the primary standard or other health standards.

Recharge Point – This includes active, proposed, and possible recharge sites on the Snake River Plain.

RICRIS – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities) – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

Toxic Release Inventory (TRI) – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

UST (Underground Storage Tank) – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

Wastewater Land Applications Sites – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

Wellheads – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

NOTE: Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.

References Cited

Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, 1997. "Recommended Standards for Water Works."

Idaho Department of Agriculture, 1998. Unpublished Data.

Idaho Department of Environmental Quality, 1997. Design Standards for Public Drinking Water Systems. IDAPA 58.01.08.550.01.

Idaho Department of Water Resources, 1993. Administrative Rules of the Idaho Water Resource Board: Well Construction Standards Rules. IDAPA 37.03.09.

University of Idaho, 2000. Moscow Basin Source Water Assessment. Idaho Water Resources Research Institute. University of Idaho. Moscow, Idaho. December 2000.

Attachment A

Bel Air Mobile Home Park Susceptibility Analysis Worksheet

The final scores for the susceptibility analysis were determined using the following formulas:

1) VOC/SOC/IOC Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.2)

2) 2) Microbial Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.35)

Final Susceptibility Scoring:

0 - 5 Low Susceptibility

6 - 12 Moderate Susceptibility

≥ 13 High Susceptibility

Ground Water Susceptibility Report

BEL AIR MOBILE HOME “OLD WELL” Public Water System Number 2290002 5/8/01 12:00:54 PM

1. System Construction		SCORE			
Drill Date	8/8/69				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	YES	7/2/2001			
Well meets IDWR construction standards	NO	1			
Wellhead and surface seal maintained	NO	1			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	YES	0			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		4			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	YES	0			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
Total Hydrologic Score		4			
3. Potential Contaminant / Land Use - ZONE 1A		IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	IRRIGATED PASTURE	1	1	1	1
Farm chemical use high	YES	0	2	2	
IOC, VOC, SOC, or Microbial sources in Zone 1A	YES	YES	NO	NO	YES
Total Potential Contaminant Source/Land Use Score - Zone 1A		1	3	3	1
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	NO	0	0	0	0
(Score = # Sources X 2) 8 Points Maximum		0	0	0	0
Sources of Class II or III leacheable contaminants or	NO	0	0	0	
4 Points Maximum		0	0	0	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B	Less Than 25% Agricultural Land	0	0	0	0
Total Potential Contaminant Source / Land Use Score - Zone 1B		0	0	0	0
Potential Contaminant / Land Use - ZONE II					
Contaminant Sources Present	NO	0	0	0	
Sources of Class II or III leacheable contaminants or	NO	0	0	0	
Land Use Zone II	Greater Than 50% Irrigated Agricultural Land	2	2	2	
Potential Contaminant Source / Land Use Score - Zone II		2	2	2	0
Potential Contaminant / Land Use - ZONE III					
Contaminant Source Present	NO	0	0	0	
Sources of Class II or III leacheable contaminants or	NO	0	0	0	
Is there irrigated agricultural lands that occupy > 50% of	YES	1	1	1	
Total Potential Contaminant Source / Land Use Score - Zone III		1	1	1	0
Cumulative Potential Contaminant / Land Use Score		4	6	6	1
4. Final Susceptibility Source Score		9	9	9	8
5. Final Well Ranking		**High**	**Moderate**	**Moderate**	**High**

Ground Water Susceptibility Report

BEL AIR Mobile Home Park "NEW WELL" Public Water System Number 2290002 5/8/01 2:44:51 PM

1. System Construction		SCORE				
Drill Date		6/21/92				
Driller Log Available		YES				
Sanitary Survey (if yes, indicate date of last survey)		YES	1996			
Well meets IDWR construction standards		NO	1			
Wellhead and surface seal maintained		YES	0			
Casing and annular seal extend to low permeability unit		YES	0			
Highest production 100 feet below static water level		YES	0			
Well located outside the 100 year flood plain		YES	0			
	Total System Construction Score		1			
2. Hydrologic Sensitivity						
Soils are poorly to moderately drained		YES	0			
Vadose zone composed of gravel, fractured rock or unknown		YES	1			
Depth to first water > 300 feet		NO	1			
Aquitard present with > 50 feet cumulative thickness		NO	2			
	Total Hydrologic Score		4			
3. Potential Contaminant / Land Use - ZONE 1A			IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	IRRIGATED PASTURE		1	1	1	1
Farm chemical use high		YES	0	2	2	
IOC, VOC, SOC, or Microbial sources in Zone 1A		YES	YES	NO	NO	YES
	Total Potential Contaminant Source/Land Use Score - Zone 1A		1	3	3	1
Potential Contaminant / Land Use - ZONE 1B						
Contaminant sources present (Number of Sources)		YES	1	1	1	1
(Score = # Sources X 2) 8 Points Maximum			2	2	2	2
Sources of Class II or III leacheable contaminants or		YES	1	1	1	
4 Points Maximum			1	1	1	
Zone 1B contains or intercepts a Group 1 Area		NO	0	0	0	0
Land use Zone 1B	Less Than 25% Agricultural Land		0	0	0	0
	Total Potential Contaminant Source / Land Use Score - Zone 1B		3	3	3	2
Potential Contaminant / Land Use - ZONE II						
Contaminant Sources Present		YES	2	2	2	
Sources of Class II or III leacheable contaminants or		YES	1	1	1	
Land Use Zone II	Greater Than 50% Irrigated Agricultural Land		2	2	2	
	Potential Contaminant Source / Land Use Score - Zone II		5	5	5	0
Potential Contaminant / Land Use - ZONE III						
Contaminant Source Present		YES	1	1	1	
Sources of Class II or III leacheable contaminants or		YES	1	1	1	
Is there irrigated agricultural lands that occupy > 50% of		YES	1	1	1	
	Total Potential Contaminant Source / Land Use Score - Zone III		3	3	3	0
Cumulative Potential Contaminant / Land Use Score			12	14	14	3
4. Final Susceptibility Source Score			7	8	8	6
5. **Final Well Ranking**			**High**	**Moderate**	**Moderate**	**High**